



September 3, 2019

John Johnson
The JWJ Group
3599 NW Carlton Street, Suite 201
Silverdale, WA 98383

Re: Lavender Meadows Irrigation Ditch Research Discussion.

Dear John:

Ecological Land Services, Inc. (ELS) has been contracted to address concerns about tightlining the irrigation ditch that crosses the Lavender Meadows property located on N Sequim Avenue, in Sequim, Washington. The onsite irrigation ditch is part of the Sequim Prairie Tri-Irrigation Association, which originates at the Dungeness River. The ditch system winds its way through Sequim and along some of the downtown streets. It is tightlined before it reaches Lavender Meadows and daylights about 300 feet south of the southwest property corner (Photo 3). The concerns that have arisen from review by Washington Department of Ecology regarding whether the ditch is considered a stream and the Graysmarsh is concerned about the source of water to Graysmarsh.

Research was conducted on the history of the Lavender Meadows Irrigation Ditch for the stream and hydrology concerns. The research as presented in the bullets below indicates that the Lavender Meadows ditch is an irrigation ditch and has been maintained as such for over 100 years.

1. The irrigation system in Sequim was established in 1896 and at that time, flood irrigation was the main avenue of irrigating fields. Historic flood irrigation is indicated by the concrete weir that was observed in the section of ditch that curves north and runs along the east property line (Map 2; Photo 7). Aerial photo research shows the ditch present across Lavender Meadows since at least 1941 (Map 3).
2. Flood irrigation is no longer used in the Sequim Prairie Tri-Irrigation Association-it is now pumped to sprinkler systems. There is an old pump near the concrete weir functioned to pump water to sprinkler systems (Photo 8).
3. Irrigation water turned on April 15th and shut off on September 15th each year, so water will be turned off in 12 days (Photos 5 to 14).
4. The ditch across Lavender Meadows is a continuation of ditches that run through the City of Sequim where it lies along roadways and sidewalks. The section of ditch to the southwest of Lavender Meadows exits a pipe and flows for several hundred feet in an open

ditch along North Sequim Avenue (Photos 3 and 4). The open ditch continues along the city street until it enters the Lavender Meadows ditch (Map 1).

5. Clallam County Critical Areas Map
 - a. Gierin Creek is mapped to the east of Lavender Meadows property (Map 2).
 - b. The ditch is identified as an open, irrigation ditch (Map 2).
6. The Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species Maps (PHS) does not identify the Lavender Meadows ditch as a priority habitat and there are no priority species identified (Map 4).
7. WDFW PHS indicates the use of Gierin Creek by coho salmon, steelhead, fall chum, and pink salmon (odd year). These species typically spawn in the fall months, however, the fall chum and pink salmon spawn in the spring but do not remain in freshwater for long periods so spawn close to the mouth of the stream. They would not occur within the irrigation ditch because of their specific habitat needs.
8. Water flows through the irrigation ditch from April to September each year, which coincides with chum and pinks spawning. Coho salmon spawns from September to November and steelhead spawn from November to April in higher in the watershed. Because these species spawn in the fall months and there is no water in Lavender Meadows ditch, there is no spawning habitat within the onsite ditch.
9. Fish are prevented from entering the irrigation system at the Dungeness River outtake by fish screens at the start of the irrigation system (Photo 2).
10. A formal agreement between the irrigation districts and the city was drafted to allow tightlining irrigation ditches within the city limits with no permitting process or mitigation. The agreement was created after this property was annexed into the city in 2005. Based on the wording of the agreement, the Lavender Meadows ditch could be tightlined without a permit or mitigation.
11. The original project, which was vested until 2015, proposed tightlining the ditch with the support of the Graysmarsh biologist, the Jamestown S’Klallam Tribe, the Clallam Conservation District, the Sequim Prairie Tri-Irrigation Association, and the city of Sequim.
12. Tightlining the ditch across Lavender Meadows will protect the waters flowing from April to September of each year from potential contamination from the future developed.
13. There will be no change to the water flow in the Lavender Meadows ditch when it is tight-lined because the same amount of water will flow through the pipe as is currently flowing in the ditch from April to September.

Based on the research conducted for the proposed tightline, the Lavender Meadows ditch is not a regulated stream because the water flow is controlled between April 15th and September 15th each year. It is also maintained by removing built-up sediment, which is placed alongside the ditch and forms low berms on both sides (Photo 9). The ditch does not support fish species because the water is turned off during the spawning season for coho salmon and steelhead. There is a fish screen at the outtake that prevents fish passage into the irrigation system. The ditch tightline will

not reduce the water flow during irrigation season so there will be no reduction in this water source for Graysmarsh. Research of the original plat proposal has revealed that there was little to no opposition to tightlining the irrigation ditch and there is support for the current tightline proposal by the Jamestown S'Klallam Tribe as well as the city of Sequim, which allows tightlining of irrigation ditches without permits or mitigation.

Sincerely,


Joanne Bartlett
Professional Biologist

Attachments

Map 1: Clallam County Irrigation Districts Map

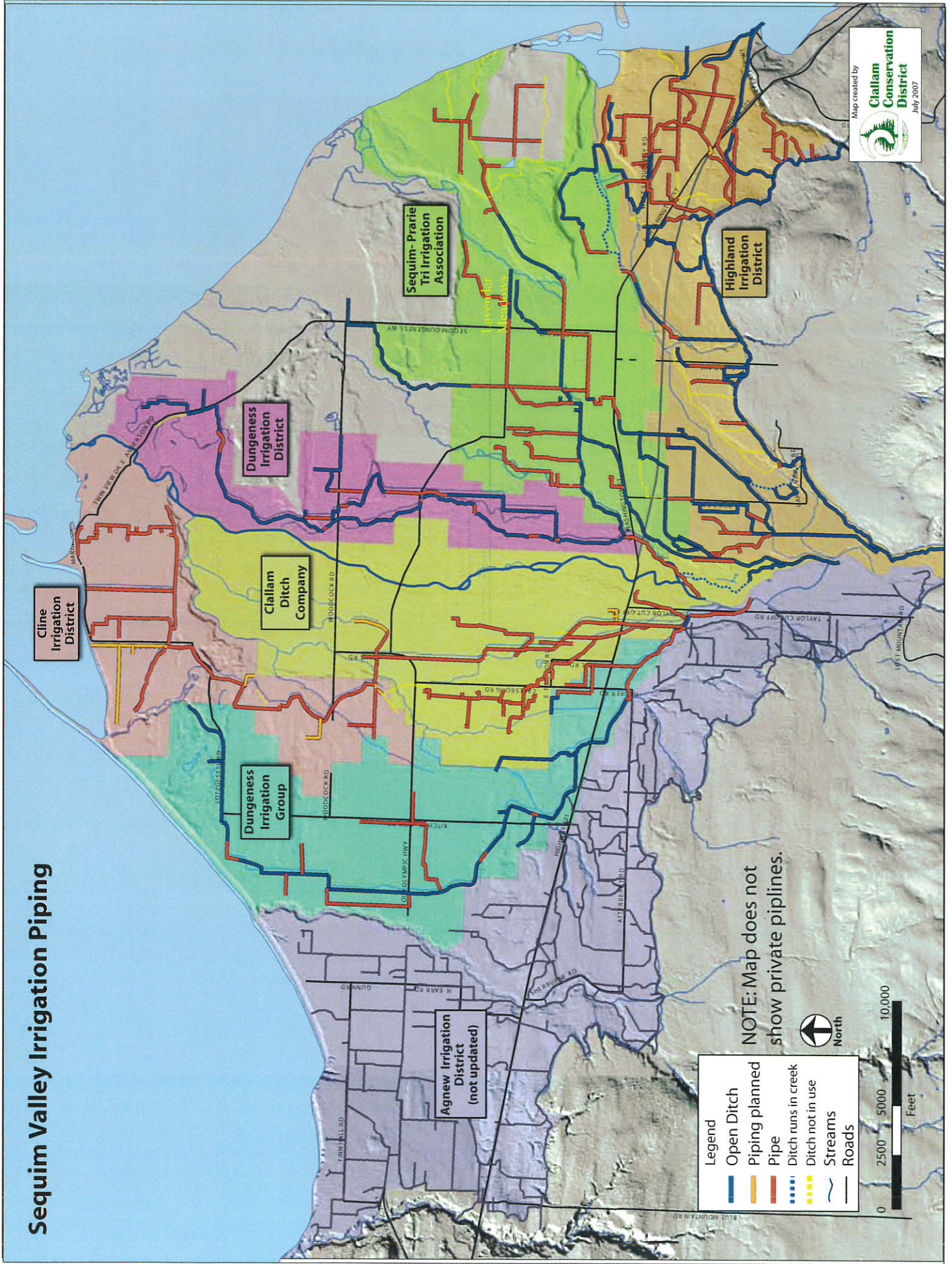
Map 2: Clallam County Parcel Search Map

Map 3: 1942 Aerial Photo

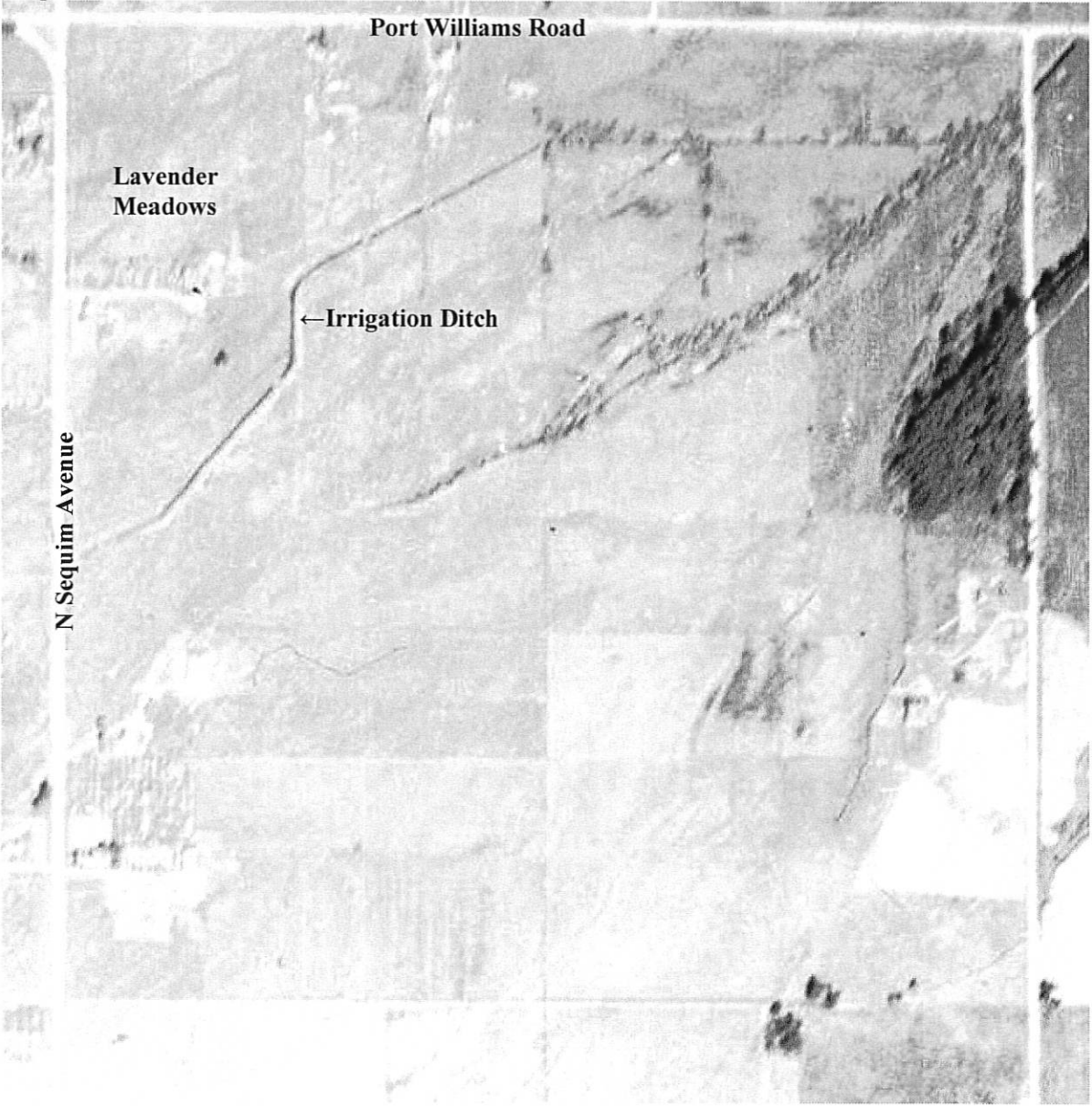
Map 4: WDFW PHS Map

Photo Array

Sequim Valley Irrigation Piping



Map 3: 1942 Aerial Photo of Lavender Meadows



Map 4: Washington Department of Fish and Wildlife, Priority Habitats and Species Map



Lavender Ditch

Photo Array

These photos document conditions of the irrigation ditch crossing the Lavender Meadows project site beginning with the outtake channel from the Dungeness River to the offsite portions of the ditch.



Photo 1: Outtake channel from the Dungeness River.



Photo 2: Fish screen at the outtake channel.



Photo 3: Daylighted ditch along N Sequim Avenue.



Photo 4: Daylighted section of ditch along N Sequim Avenue.



Photo 5: Lavender Meadows Irrigation Ditch looking southwest toward N Sequim Avenue



Photo 6: Lavender Meadows ditch looking northeast toward the weir and pump.



Photo 7: Lavender Meadows ditch showing weir for historic flood irrigation.



Photo 8: Lavender Meadows ditch showing old pump for onsite irrigation.



Photo 9: Irrigation ditch looking south just before exiting the property. The high area in the background is a pile of old ditch spoils.



Photo 10: Taken from same location as Photo 9 and looks east as the ditch exits the property.



Photo 11: Irrigation ditch as it enters the property to the east.



Photo 12: Irrigation ditch as it flows toward Gierin Creek Lane.



Photo 13: Irrigation ditch on the east side of Gierin Creek Lane. The apparatus along the ditch is a flow meter with concrete weir.



Photo 14: Irrigation ditch east of Gierin Creek Lane as it flows to the northeast.